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MENLO PARK, CA. 94025



vol. 24

APRIL 11, 1980

PAARA

Graphs



**palo alto
AMATEUR
RADIO ASSN.**

MENLO PARK C.D. RADIO CLUB, K6YQT

SHAVER RADIO, INC.

DAVID SHAVER
K6DTX

1378 S. BASCOM AVE
SAN JOSE, CALIF
408 998-1103

SALES
SERVICE
INSTALLATION

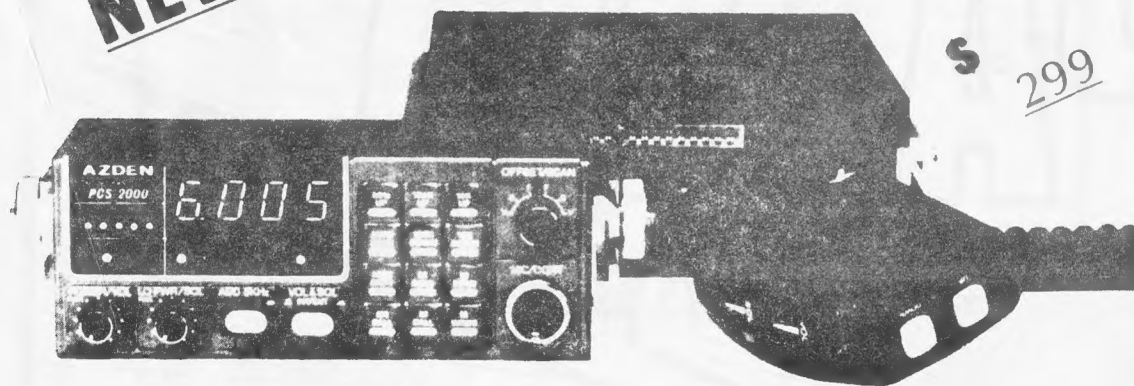
AZDEN

REVOLUTIONIZES THE STATE OF THE ART
AWE AND AZDEN INTRODUCE THE BRILLIANT NEW PCS-2000
MICROCOMPUTER CONTROLLED

2 METER FM TRANSCEIVER

NOT \$550.00
INTRODUCTORY
PRICE ,

NEW!



COMPARE THESE FEATURES
WITH ANY UNIT AT ANY PRICE

- **FREQUENCY RANGE:** Receive and transmit 144.00 to 147.995 MHz 5Khz steps + MARS CAP* and MULTIPLE OFFSET BUILT IN
- **ALL SOLID STATE-CMOS PL. DIGITAL SYNTHESIZED.**
- **SIZE: UNBELIEVABLE! ONLY 6 1/4" x 2 1/4" x 9 1/4"** COMPARE!
- **MICROCOMPUTER CONTROLLED:** All scanning and frequency control functions are performed by microcomputer.
- **DETACHABLE HEAD:** The control head may be separated from the radio for use in limited spaces and for security purposes.
- **SIX-CHANNEL MEMORY:** Each memory is re-programmable. Memory is retained even when the unit is turned off.
- **MEMORY SCAN:** The six channels may be scanned in either the "busy" or "vacant" modes for quick, easy location of an occupied or unoccupied frequency.
- **FULL-BAND SCAN:** All channels may be scanned in either "busy" or "vacant" mode. This is especially useful for locating repeater frequencies in an unfamiliar area.
- **INSTANT MEMORY-1 RECALL:** By pressing a button on the microphone or front panel, memory channel 1 may be recalled for immediate use.
- **MIC-CONTROLLED VOLUME AND SQUELCH:** Volume and squelch can be adjusted from the microphone for convenience in mobile operation.

- **ACCESSORY OFFSET:** With one optional crystal, three non-standard offsets become available.
- **25 WATTS OUTPUT:** Also 5 watts low power for short-distance communication.
- **DIGITAL S/R F METER:** LEDs indicate signal strength and power output. No more mechanical meter movements to fall apart!
- **LARGE 1 1/2-INCH LED DISPLAY:** Easy-to-read frequency display minimizes "eyes off the road" time.
- **PUSHBUTTON FREQUENCY CONTROL FROM MIC OR FRONT PANEL:** Any frequency may be selected by pressing a microphone or front panel switch.
- **SUPERIOR RECEIVER SENSITIVITY:** 0.28 uV for 20 dB quieting. The squelch sensitivity is superb, requiring less than 0.1 uV to open. The receiver audio circuits are designed and built to exacting specifications, resulting in unsurpassed received signal intelligibility.
- **TRUE FM, NO 1 PHASE MODULATION:** Transmitted audio quality is optimized by the same high standard of design and construction as is found in the receiver. The microphone amplifier and compression circuits offer intelligibility second to none.
- **OTHER FEATURES:** Dynamic Microphone, built in speaker, mobile mounting bracket, external remote speaker jack (head and radio) and much, much more. All cords, plugs, fuses, microphone hanger, etc. included. Weight 6 lbs.
- **ACCESSORIES:** 15' REMOTE CABLE \$29.95 *MARS CAP KIT TBA PCS-6R 4 C POWER SUPPLY \$49.95

VOLUME 24 NUMBER 4

April 11, 1980

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PAARAgaphs is the official organ of

The Palo Alto Amateur Radio Association and the Menlo Park Civil Defense Radio Club

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1980 CLUB OFFICERS

BOARD OF DIRECTORS

President : Bob Wheeler K6SEM 494 6549
Vice President : Eric Edberg W6DU 948 1748
Secretary : Gerry Tucker WA6LNV 326 4908
Treasurer : Irene Lile WB6RAF 851 7473
Trustee, K6OTX : Fred Canham K6YT 948 9238
Property : Ed Fairbanks W6AIN 322 0319
ARES Officer : Steve Stuntz K6FS 322 4952

Chairman: Bob Wheeler K6SEM
Members : Ed Fairbanks W6AIN
Swede Swenson KA6BEU
Shannon Lile K6TNY
Gerry Wagstaffe W6NIR
Terry Conboy N6RY
Jock McKaig N6YV

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PAARA POLICIES

PAARAgaphs STAFF

Membership in PAARA is \$6.00 per calander year (payable in January) which membership includes a subscription to PAARAgaphs. Interested others may subscribe to PAARAgaphs for \$6.00. Make payment to:

Editor : Bob Baum W6BFH
Production : Dave Daniel KB6WP
Advertising : Swede Swenson KA6BEU
Printing : MELLONICS A1OK
Mailing : Ed Fairbanks W6AIN
Cover : Sue Lindner L6VLY

PAARA, P.O. Box 911, Menlo Park, CA 94025

Written contributions to P. O. Box above, or, 1043 Del Norte Av., Menlo Park, CA 94025

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REGULAR MEETING

FRIDAY

***** APRIL 11, 1980 *****

7:30 P.M.

Rooms 15 & 17, Menlo Park Recreation Center, Civic Center, Alma
at Mielke Drive Menlo Park

April speaker, Erv Rasmussen, W6YPM

Peninsula Nostalgia Night

A description and discussion of Museum Pieces Erv will bring from his collection. Those who haven't seen his collection will not want to miss this meeting.

FUTURE MEETINGS: May 2, June 6

FIELD DAY June 28-29

This edition assembled by the Harper family while listening to the music of Big Bands.

General Meeting:

The general meeting was called to order by Bob, K6SEM,.

Some discussion was held concerning acquiring a trailer for our recently purchased tower. The object would be to mount the tower permanently on the trailer so it could be swung into place at the field day site. Frank, WB6QPV, volunteered to build a trailer if needed. Anybody with information please call Fred, K6YT.

Jock, K6YT, announced plans for our upcoming picnic, "April 20th". More details later.

An interesting talk and demonstration was given by master craftsman Don Topp, W6CFZ, well known for his "CB conversions". He gave the demonstration his all, including "Blood"! First Aid representatives Jerry, WA6LIJ, and Si, WA6ROM, administered emergency aid on the spot with one large bandaid.

Jim, K7UDG, and Explorer Post 599 announced their one year anniversary with PAARA and expressed their thanks for our support. Jim went on to say that all the original explorers now have their licenses.

EXPLORER CORNER

March marks the one year anniversary of Amateur Radio Post 599. I would like to express gratitude from the entire post to PAARA for its support over the last year. We couldn't ask for a finer sponsoring organization. Thank You!

Also, Post 599 would like to express its gratitude and appreciation to Jim Hartwell, K7UDG, and Liza Aguilar, WA7WXA, for without them this post would never have formed and many of us would still be unlicensed. Jim and Liza put in much time helping and guiding 599; teaching us code and theory, finding us a place to meet, taking care of paper work, and in general keeping the post together. Thanks Jim and Liza, your time and efforts are much appreciated, even though we don't always reflect it.

Over the past year we managed to get all the original members licensed, Russell Rocket, KA6IZZ, and Karl Jogis, KA6JIR, were the last original members to be licensed. Congratulations! We still have some newer members working on it... shouldn't be too much longer before they join the ranks of the licensed.

Post 599's schedule for the next few months is clear, except for the Fresno trip in May. The activities should be increasing once summer is upon us again.

In closing I would again like to thank PAARA for its support over the last year and extend a lot of appreciation to Jim and Liza for all their contributions.

73's

Bob Gallagher, KA6IRT
Post President

* * * * *

QST DE K6OTR

On February 4, 1980, K6OTR--the station nominally licensed to the South County Amateur Radio Service Club and located in the Menlo Park Red Cross building at 3540 Middlefield Road--was requested to vacate its location at that address. Ever since the Red Cross reduced its staff and operations in Menlo Park several years ago, the status of K6OTR has been in question.

The station was originally established in 1955 by Hal Moore, W6DEF, while he was a resident of Redwood City, and served as a link between the Red Cross and amateur radio. In its early years, K6OTR had close ties to the South County Amateur Radio Society (SCARS) and the W6WWJ Redwood City Civil Defense and Disaster Communications Network. It drew many of its operators from the ranks of K6QNL, the call then being used by the Menlo-Atherton High School Amateur Radio Club.

As the years passed, interest in

PALO ALTO AMATEUR RADIO ASSOCIATION

(PAARA)

ARTICLES OF INCORPORATION

STATE OF CALIFORNIA
DEPARTMENT OF STATE

To all to whom these presents shall come, Greetings:

I, FRANK M. JORDAN, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the RECORD on file in my office, of which it purports to be a copy, and that the same is full, true and correct.

In testimony whereof, I, FRANK M. JORDON, Secretary of State, have hereunto caused the Great Seal of the State of California to be affixed and my name subscribed, at the City of Sacramento, in the State of California, this 2nd day of March 1956.

s/ Frank M. Jordon

316870

ARTICLES OF INCORPORATION

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

WE, the undersigned, have this date voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the State of California and we do hereby certify:

One: The name of this corporation is: Palo Alto Amateur Radio Association, Inc.

Two: The specific and primary purposes for which this corporation is formed are:

(a) For scientific and educational purposes;

(b) To foster better friendship and closer cooperation between amateur radio operators living in the vicinity of Palo Alto;

(c) To elevate the standards of amateur equipment and operation;

(d) To secure the benefits of social and educational contacts from the members;

(e) To aid the Federal Communications Commission in the giving of license examinations, in the enforcement of laws and regulations with respect to amateur radio operation, and to aid in the investigation and suppression of television and radio interference;

(f) To cooperate fully with Federal, State and Local officials in the maintenance of emergency communications and particularly in the establishment of civil defense communications;

(g) To receive gifts and requests; to own, control, buy, lease, rent, sell, acquire, hold, convey, mortgage, hypothecical and otherwise deal with or dispose of personal property, particularly, but not limited to, radio communication equipment.

(h) Do each and everything necessary, or suitable, or proper for the accomplishment of any of the purposes or the attainment of any one or any of the subjects herein enumerated or conducive to or expedite for the interest or benefit of said corporation and to contract accordingly; and in addition exercise all powers, rights, and privileges necessary or incidental to the purpose for which said corporation is organized or the activities in which it is engaged. If at any time this corporation should dissolve or its corporate existence should cease, or its charter should be revoked, no part of its funds or property shall be distributed to or shall inure to the benefit of any member or other individual, but after payment of all indebtedness of the corporation, its remaining funds shall be distributed by the Board of Directors for the furthering of scientific and educational purposes in the field of amateur radio communications;

Three: That this corporation is organized pursuant to the General Non-Profit Corporation Law of the State of California.

Four: The county and site of California where the principal office for transac-

tion of business of this corporation is to be located in Santa Clara County.

Five: This corporation is formed as a corporation not for profit to the members thereof.

Six:

Seven: Number, classification and term of officers is established by the by-laws.

BY-LAWS

PALO ALTO AMATEUR RADIO ASSOCIATION

(PAARA)

FOR THE REGULATION, EXCEPT AS OTHERWISE PROVIDED BY STATUTE OR ITS ARTICLES OF INCORPORATION OF PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

Article I. Members.

(a) The members of this corporation shall be divided into two classifications, namely active members and associate members. An active member shall be any person holding a valid amateur radio operators license. All other members shall be associate members. All members shall have full voting privileges, but only active members shall hold office.

(b) Any prospective member may apply for membership at his first attended meeting. Applications for membership may be voted upon at this same meeting. A three-fourth's majority of the members present shall be required to elect an applicant to membership.

(c) Upon being elected to membership, the applicant shall pay a fee of \$1.00 and shall commence paying dues at the rate of \$4.00 per year. All dues shall become payable on January 1 for the ensuing year, and members elected to membership during the course of a year shall make a pro rata payment for the balance of the year. Upon said election and said payment, the applicant's name shall be inscribed in the membership book.

(d) Any member who fails to pay his dues for a period of three months shall, at the discretion of the Board of Directors, be dropped from membership book of the corporation.

Article II. Corporate powers.

The corporate powers of this corporation shall be vested in a Board of Directors, all of whom shall be members of this corporation in good standing. Four members of the Board of Directors shall constitute a quorum for the transaction of business.

Article III. Board of Directors.

The Board of Directors shall consist of the president and six directors chosen from the membership. The president shall be elected for a period of one year and the directors shall be elected for a period of two years at

the regular meeting to be held on the first Friday of December of each year. Three directors shall be elected each year and in the event any director withdraws from the corporation, the balance of his term shall be filled by an appointment by the President. The following shall be initial directors with terms expiring on the dates shown:

Name	Date
Parker M. Robinson, Jr.	December 7, 1956
William Luebke	December 7, 1956
Eric Edberg	December 7, 1956
Richard A. Fisher	December 1957
Robert J. Turner	December 1957
Robert G. Slick	December 1957

Article IV. Powers of Directors.

Regular meetings of the Board of Directors shall be held at the call of the President or, in his absence, the Vice-President, on such notice as is determined by the Board of Directors. Special meetings of the Board of Directors may be called by the President or Vice-President on twentyfour hours' notice to each Director, either personally or by mail or telephone.

The Directors shall have the power:

- (1) to have general charge of all interests of the organization;
- (2) the Directors shall consider and report at each meeting all proposals for the benefit of the individual members or the general welfare of the corporation;
- (3) the Board of Directors shall adopt ways and means for the advancement of the corporation, designate work to be done between meetings of the corporation, audit all accounts and expenses, direct the expenditure of funds of the corporation but not in excess of the amount held by the Treasurer.

Article V. Duties of the Directors.

It shall be the duty of the Directors to

PAARA ROSTER, APRIL, 1980

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Adachi, Richard R.	W6RVS	2 Coleman Pl.	Menlo Park, CA	94025	
Aguilar, Liza	WA7WXA	P.O. Box 7410	Stanford, CA	94305	
Allen, Kenneth R.	WB6BCV	3784 Grove Av.	Palo Alto, CA	94303	494 8868
Alexander, Mike	KA6GRU	355 Barton Wy.	Menlo Park, CA	94025	324 9246
Anderson, Andrew J.	K6EHS	735 Mayview Av.	Palo Alto, CA	94303	494 0831
Arnold, John L.	WA6YSY	550 Morse Av.	Sunnyvale, CA	94086	
Arcularius, H. Robert	WA6ION	640 Fairmede Av.	Palo Alto, CA	94306	493 0797
Bartelme, John P.	WA6AMC	1025 San Mateo Dr.	Menlo Park, CA	94025	
Baum, Douglas A.	KA6DQR	P.O. Box 993	Galveston, TX	77553	
Baum, Robert A.	W6BPH	1043 Del Norte Av.	Menlo Park, CA	94025	325 0497
Brodie, D. H.	W6PGQ	315 Cotton St.	Menlo Park, CA	94025	323 0353
Buonocore, John J.	KA6CUG	112 Oakwood Dr.	Redwood City, CA	94061	366 1658
Burke, Thomas E.	WA6KVT	1101 5th Av.	Redwood City, CA	94063	368 7748
Cady, Henry G.	W6PSY	P. O. Box 883	Clearlake Highlands, CA	95422	
Callander, George	WA6SZX	51 Primrose Wy.	Palo Alto, CA	94303	856 1752
Camp, Edwin K.		1161 Cloud Av.	Menlo Park, CA	94025	854 5640
Canham, Fred F.	K6YT	691 Casita Wy,	Los Altos, CA	94022	948 9238
Chan, Loren B.	WA6ENC	6182 Ocho Rios Dr.	San Jose, CA	95132	629 1852
Cary, Charles E.	KA6CZN	940 Arbor Rd. Apt. C	Menlo Park, CA	94025	323 6401
Chandler, Frank	WB6QPV	1040 Menlo Oaks Dr.	Menlo Park, CA	94025	322 7678
Churchill, Paul K.	W6QBY	3706 Pac. Cst Hy.	Ventura, CA	93001	643 6760
Clark, Ed	W6KJI	3657 Oak Knoll Dr.	Redwood City, CA	94062	366 1817
Collins, H. R. (Dick)	K6ANN	1921 Birch Av.	San Carlos, CA	94070	593 8952
Conboy, Terry	N6RY	1231 Crestview Dr.	San Carlos, CA	94070	592 8750
Crocker, Earl W.	W6VYC	224 Selby Ln.	Atherton, CA	94025	366 2790
Croft, William	WD9ADG	20 Coleman AV, Apt 20	Menlo Park, CA	94025	
Daniel, Dave	KB6WP	240 University Dr.	Menlo Park, CA	94025	325 3347
DeLiban, Robert	W6FGL	1015 Lemon St.	Menlo Park, CA	94025	322 6906
Dikum, Gerald	WD6CVW	1023 Menlo Oaks Dr.	Menlo Park, CA	94025	322 8300
Dorrance, David	WA6YSO	750 Coleman Av. Apt. 8	Menlo Park, CA	94025	321 6808
Doster, Landry G.	K6MPN	966 Glenman Dr.	Redwood City, CA	94061	368 8156
Dwight, Kenneth W.	WA6NYB	2371 Carmel Dr.	Palo Alto, CA	94303	856 0727
Edberg, Eric B.	W6DU	461 Heather Ct.	Los Altos, CA	94022	948 1748
Edgerton, Millard J.	WA6VZZ	49 Showers Dr.	Mountain View, CA	94040	965 6433
Edson, Willard		2165 Carmelita Dr.	San Carlos, CA	94070	
Elge, Al	AG6D	1710-A Marshall Ct.	Los Altos, CA	94022	969 1083
Fairbanks, Edmund U.	W6AIN	1049 Sonoma Av.	Menlo Park, CA	94025	322 0319
Famulener, Keith	WB6GYT	2380 Waverly St.	Palo Alto, CA	94301	326 8673
Ferranti, Richard L.	WA6NCX	215 Herriok Rd.	Newton Center, MA	02159	
Finkbeiner, Dick	W6AQL	267 Bonny St.	Mountain View, CA	94043	961 6655
Fraher, John	KA6FRK	23000 Cristo Rey Dr.	Los Altos, CA	94022	967 3822
Frye, William		536 Lincoln Av.	Palo Alto, CA	94301	326 2610
Gallagher, Robert J.	KA6IRT	1378 Ensenada Wy.	Los Altos, CA	94022	968 0847
Godwin, Myron R.		720 Coleman Av.	Menlo Park, CA	94025	322 1737
Harper, David	WB6JFH	1244 The Alameda	Redwood City, CA	94061	366 9672
Harper, Walter		1244 The Alameda	Redwood City, CA	94061	366 9672
Hartwell, James W.	K7UDG	1777 Woodland Av. #38	Palo Alto, CA		325 8309
Hausafus, Edward T.	WA6FSQ	67 Encina Av.	Atherton, CA	94025	366 5640
Hill, Robert	W1ARR	1621 Redwood Av.	Redwood City, CA	94061	367 9388
Hinton, Peter D.	WD6CVP	33 Maple	Atherton, CA	94025	
Hogsett, Gerald R.	W6PPK	211 Hedge Rd.	Menlo Park, CA	94025	
Hogsett, Jerry	KA6FYW	1446 Wildrose Wy	Mountain View, CA	94043	967 1650

Hornback, Huntley	KA6HEB	1474 Marlborough Av.	Los Altos, CA	94022	
Hornback, John	KA6FYX	1474 Marlborough Av.	Los Altos, CA	94022	961 1991
Hotz, Preston E.	K6WD	209 Blackburn Av.	Menlo Park, CA	94025	325 8900
Ice, George E.	K6CMT	855 Sommerset Ct.	San Carlos, CA	94070	593 0661
Jenkins, Bill	WB6IML	2360 St. Francis	Palo Alto, CA	94303	324 8589
Jenson, Alan S.	W6UVP	2312 Santa Anna	Palo Alto, CA	94303	856 6274
Johnson, Don	W6AAQ	809 Capay St.	Esparta, CA		
Kanthack, Kurt H.	WD6BGV	165 Stonepine Ln.	Menlo Park, CA	94025	
Katz, Nolan	KB6LT	1030 Silverhill Rd.	Redwood City, CA	94061	366 7286
King, William R. Jr.	N6CHI	875 Sunset Dr.	San Carlos, CA	94070	595 0258
Kirkley, Charles R.		P.O. Box 3694, Dept PAAR	Stanford, CA	94305	
Korsak, Andrew J.	VE3FPZK	504 Lakemead Wy.	Redwood City, CA	94062	366 5228
Krawetz, Bruce	N6AOZ	654 Barnsley Wy.	Sunnyvale, CA	94087	
Krawetz, Howard M.	N6HM	654 Barnsley Wy.	Sunnyvale, CA	94087	739 7936
Lapp, Kevin	WA6FHC	1096 Connecticut Dr.	Redwood City, CA	94061	364 2654
Laird, Richard J.	WA6BQY	3927 Louis Rd.	Palo Alto, CA	94303	493 4315
LarRieu, Barry J.	WA6UIM	P.O. Box 752	Menlo Park, CA	94025	321 1225
Larson, R. Alan	WA6AZP	700 Arbor Rd. #3	Menlo Park, CA	94025	326 6430
Lazier, John K. D.	W6HBT	950 Blair Ct.	Palo Alto, CA	94303	326 0594
Liljegren, Gary	W6SH	P.O. Box 73	Des Moines, IA	50301	277 1111
Lile, Irene	WB6RAF	154 Wayside Rd.	Portola Valley, CA	94025	851 7473
Lile, Shannon	K6TNY	154 Wayside Rd.	Portola Valley, CA	94025	851 7473
Lin, David	N6WN	892 Mango Av.	Sunnyvale, CA	94087	
Lockhart, Robert J.	N1AFN	P.O. Box 1026	Mountain View, CA		854 5426
McKaig, Jock	N6YV	651 Teredo Dr.	Redwood City, CA	94065	
Magnuski, Hank	KA6M	311 Stanford Av.	Menlo Park, CA	94025	
Mager, Robert F.	WA6DVI	13245 Rhoda Dr.	Los Altos Hills, CA	94022	941 2218
Martin, Hank	W6UCE	3283 Kipling St.	Palo Alto, CA	94306	493 9046
McElhinney, W.G. (Bill)		666 Tennyson Av.	Palo Alto, CA	94301	325 9808
McEnmerney, Jack	W6LII	73 Ensenada Rd.	San Carlos, CA	94070	591 8526
McGuire, David	W6JTH	5943 Tompkins Dr.	San Jose, CA	95129	
McNamee, Mike	KE6S	3833 Park Blvd. Apt. 12	Palo Alto, CA	94306	493 2258
McReynolds, Leslie N.	WB6RNO	12051 Moody Springs Ct.	Los Altos Hills, CA	94022	948 2777
Maceijowski, Antoni	WA6KJJ	734 Ashbourne Dr.	Sunnyvale, CA	94087	739 1145
Moore, Harold F. (Hal)	W6DEF	12685 Manor Way	Auburn, CA	95603	
Morton, Bob	WA6SOI	748 San Jude Av.	Palo Alto, CA	94306	
Moss, George E.	W6AZS	4049 Middlefield Rd.	Palo Alto, CA	94303	
Nelson, Raymond A. (Ray)	KB6RZ	786 Allen Ct.	Palo Alto, CA	94303	493 9251
Narvaez, Bill		327 D St.	Redwood City, CA	94063	369 4007
Nicholson, Carl Jr.	KA6EKG	1167 Walnut	San Carlos, CA	94070	592 5287
Nixon, George	GI3OEN	168 Kellogg Av.	Palo Alto, CA	94301	326 9438
Porter, Wallace	K6URO	3328 Kenneth Dr.	Palo Alto, CA	94303	494 7038
Pierce, Cameron G	K6RU	570 La Mesa Dr.	Ladera, CA	94025	854 3055
Rasmussen, Erwin A.	W6YPM	164 Lowell St.	Redwood City, CA	94062	368 2558
Read, Walter A.	W6ASH	10371 Berkshire Dr.	Los Altos, CA	94022	948 6753
Roberts, John F. Jr.	W6QXP	2140 Bryant St.	Palo Alto, CA	94303	327 0690
Roche, Curtis H.	K6AL	3890 Louis Rd.	Palo Alto, CA	94303	494 2643
Root, L. Eugene	WB6OOO	1340 Hillview Dr.	Menlo Park, CA	94025	323 2666
Runyon, Steven A.	WD6AAS	461 Myrtle St.	Redwood City, CA	94062	365 3199
Russell, A. W.	W6TFT	2505 Hopkins Av.	Redwood City, CA	94062	365 4258
Ryan, Ralph B.	WB6NNL	1021 Stanley Wy.	Palo Alto, CA	94303	323 7362
Schellenberg, Chris	WB6WBK	311 Oakwood Pl.	Menlo Park, CA	94025	324 4591
Scherf, Thomas	K6JBR	411-B 5th Av.	Redwood City, CA	94063	365 4068
Schlaman, Gregg	WA6ECQ	4180 Wallis Ct.	Palo Alto, CA	94306	

Schrauwen, Adrianus	KA6ATG	3155 Stockton Pl.	Palo Alto, CA	94303	494	6256
Schumacher, Leonard J.	WA6HLE	902 Avon	Belmont CA	94002	591	4385
Sherrod, H. C. (Clay)	K5OSQ	1475 Woodberry Av.	San Mateo, CA	94403	349	1876
Shore, J. Neville, Sr.	K6OYN	4272 Suzanne Dr.	Palo Alto, CA	94306	493	6926
Shore, J. Neville, Jr.	WB6LVP	4272 Suzanne Dr.	Palo Alto, CA	94306	493	6926
Simpson, Richard A.	W6JTH	3326 Kipling	Palo Alto, CA	94306	494	9272
Smith, Dan	KA6IXE	2001 Valparaiso Av.	Menlo Park, CA	94025	325	9995
Stainback, Albert W.	WA6GVP	805 Evergreen St.	Menlo Park, CA	94025	322	6384
Starkey, Jerry	WA6LIJ	736 Filip Rd.	Los Altos, CA	94022	964	6584
Stein, Seymore (Sy)	WA6ROM	13080 Lorene Ct.	Mountain View, CA	94040	967	0362
Stiles, Robert	WA6MIV	60 Queens Ct.	Atherton, CA	94025	325	5022
Streib, Fred	W6NA	736 Garland Dr.	Palo Alto, CA	94303	326	7846
Stuntz, Stephen E.	K6FS	164 Oak Ct.	Menlo Park, CA	94025	322	4952
Sue, Jeffrey	WA6SLF	1016 Middle Av. Apt. 1	Menlo Park, CA	94025	321	7750
Swenson, Lloyd L.	N6CHL	73 Adam Wy.	Atherton, CA	94025	368	8503
Talbert, Elmer	W6PFC	2414 Read Av.	Belmont, CA	94002	593	7320
Tallmon, W. B.	W6DVB	355 Santa Margarita Av.	Menlo Park, CA	94025	326	0112
Taylor, Rob		925 Waverly St (101)	Palo Alto, CA	94301	321	5089
Tennissen, Thomas	KH6DZB	23000 Cristo Rey Dr.	Los Altos, CA	94022	967	3822
Thekan, Paul	WA6IJP	335 Rutherford Av.	Redwood City, CA	94061	369	4034
Tiffany, Willard D.	W6GNX	880 Coleman Av.	Menlo Park, CA	94025	324	4524
Topp, Don	W6CFZ	1092 Metro Circle	Palo Alto, CA	94303	858	0225
Troster, John G.	W6ISQ	82 Belbrook Wy.	Atherton, CA	94025	854	3939
Tucker, Gerald H.	WA6LNV	1112 Ramona St.	Palo Alto, CA	94301	326	4908
Vanover, James F.		3801 Miranda Av. M.P.D.	Palo Alto, CA	94304		
Vercelli, John	KA6EWX	18920 McFarland Av.	Saratoga, CA	95070		
Vickery, Leslie	W6AKR	980 Third St.	Redwood City, CA	94063	368	5175
Vosper, Larry	KA6DZM	P.O. Box 8398, SF Amdt.	San Francisco, CA	94128	349	9374
Wagstaffe, Gerard	W6NIR	4 Robert S Dr.	Menlo Park, CA	94025	325	4670
Wallace, Robert E.	K6OL	240 Cervantes Rd.	Portola Valley, CA	94025	851	0249
Wardlow, Vance	W6FLE	1260 Bellair Wy.	Menlo Park, CA	94025	854	0803
Wheeler, Robert	K6SEM	868 Elbridge Wy.	Palo Alto, CA	94303	494	6549
Wickman, Fred	WA6BCH	P.O. Box 703	Los Altos, CA	94022	948	2734
Wilder, H. Kenneth	K6RB	58 Catalpa Dr.	Atherton, CA	94025	323	9953
Wortman, Leon	W6KTP	743 Holly Oak Dr.	Palo Alto, CA	94303	494	2613
Yelton, Perry	N6COH	3401 E. Bayshore Rd.	Redwood City, CA	94063	366	7880
Zaner, Bill	WB6IYS	885 Sharon Ct.	Palo Alto, CA	94301	328	2677
Zobel, Jerome F.	W6ARA	877 Northampton Dr.	Palo Alto, CA	94303	322	0063

W6AAQ Don Johnson	KA6GRU Mike Alexander	KB6RZ Ray Nelson
WD6AAS Steve Runyon	WB6GVP Maurice Lambert	KE6S Mike McNamee
WD9ADG Bill Croft	WB6GYT Keith Famulener	K6SEM Bob Wheeler
W6AIN Ed Fairbanks	W6HBJ John Lazier	W6SH Gary Liljegren
W6AKR Les Vickery	KA6HEB Huntley Hornback	WA6SLF Jeffrey Sue
K6AL Curt Roche'	WA6HLE Leonard Schumacher	WA6SOI Bob Morton
K6ANN Dick Collins	N6HM Howard Drawetz	WB6STW Dan Curry
WA6AMC John Bartleme	WB6HWZ Willard Griffith	WA6SZX George Callander
N6AOZ Bruce Krawetz	WA6IJP Paul Thekan	W6TFT Al Russell
W6AQL Dick Pinkbeiner	WA6ION Richard Arcularius	K6TNY Shannon Lile
W6ARA Jerry Zobel	KA6IRT Bob Gallagher	W6UCE Hank Martin
W1ARR Bob Hill	W6ISQ John Troster	K7UDG Jim Hartwell
W6ASH Walt Read	KA6IXE Dan Smith	K6URO Wallace Porter
W6AZP Alan Larson	WB6IYS Bill Zaner	W6UVP Alan Jensen
W6AZS George Moss	K6JBR Tom Scherf	W6VYC Earl Crocker
WA6BCH Fred Wickman	WB6JFH Dave Harper	WA6VZZ Millard Edgerton
WB6BCV Ken Allen	W6JHU Dave McGuire	WB6WBK Chris Schellenberg
W6BFH Bob Baum	W6JTH Richard Simpson	K6WD Pres Hotz
WA6BQY Dick Laird	W6KJI Ed Clark	N6WN David Lin
WD6BGV Kurt Kanthack	W6KTP Leon Wartman	KB6WF Dave Daniel
W6CFZ Don Topp	WA6KVT Tom Burke	WA7WXA Liza Aguilar
N6CHD Perry Yelton	W6LII Jack McEnnerney	W6YPM Erv Rasmussen
N6CHI Bill King	WA6LIJ Gerry Starkey	WA6YSY John Arnold
N6CHL Swede Swenson	WB6LML Bill Jenkins	WA6YSO David Dorrance
K6CMT George Ice	WA6LMV Gerry Tucker	K6YT Fred Canham
KA6CUG John Buonocore	KB6LT Nolan Katz	N6YV Jock MacKaig
WD6CVP Peter Hinton	K6LVJ Gary Perazzo	Ed Camp
WD6CVW Gerald Dikum	WB6LVP Neville Shore	Willard Edson
KA6CZN Charles Cary	KA6M Hank Magnuski	Bill Frye
AG6D Al Elge	WA6MIV Bob Stiles	Tad Godwin
W6DEF Hal Moore	K6MPN Dusty Doster	Walt Harper
KA5DQR Doug Baum	WA6NCX Rick Ferranti	Karl Jogie
W6DU Eric Edberg	W6NIR Gerry Wagstaffe	Charles Kirkley
W6DVB Bill Tallmon	WB6NNL Ralph Ryan	Sandy Large
WA6DVI Bob Mager	WA6NYB Ken Dwight	Bill McElhinney
KH6DZB Tom Tennissen	GI3OEN George Nixon	Rob Taylor
KA6DZM Larry Vosper	K6OL Bob Wallace	Jim Vanover
WA6ECQ Gregg Schlaman	WB6OOO Gene Root	
K6EHS Andy Anderson	WA6OPA Gerry Laxon	
KA6EKG Carl Nicholson	K5OSQ Clay Sherrod	
K6EM Roy Wardell	K6OYN Neville Shore	
WA6ENC Loren Chan	W6PGQ David Brodie	
KA6EWX John Vercelli	W6PPK Gerry Hoggsett	
W6FGL Rob De Liban	W6PSY Henry Cody	
WA6FHC Kevin Lapp	WB6QPV Frank Chandler	
W6FLE Vance Wardlow	W6QBY Paul Churchill	
KA6FRK John Fraher	W6QXP John Roberts	
K6FS Steve Stuntz	WB6RAF Irene Lile	
WA6FSQ Ed Hausafus	K6RB Ken Wilder	
KA6FYW Gerald Hogsett	WB6RNO Les McReynolds	
KA6FYX Huntly Hornback	WA6ROM Sy Stein	
VE3FZK Andy Korsak	K6RU Cam Pierce	
W6GNX Tif Tiffany	W6RVS Dick Adachi	
WA6GVP Al Stainback	N6RY Terry Conboy	

keep complete records of all their minutes and acts, and to present a full statement at the regular annual meeting of the members, showing in detail the assets and liabilities of the corporation and generally the condition of its affairs.

Article VI. Duties of the President.

It shall be the duty of the President to preside at all meetings of the corporation and to preside at all meetings of the Board of Directors. It shall be the further duty of the President to make all committee appointments.

Article VII. Duties of the Vice-President.

It shall be the duty of the Vice-President to perform all the duties of the President during his absence.

Article VIII. Duties of the Secretary.

It shall be the duty of the Secretary to receive all communications that may be addressed to the club and to keep a full report of the proceedings of each meeting. He shall read all communications upon request of the President.

The Secretary shall also promptly deliver all books, papers, or other property of the corporation to his successor in office, or whomsoever the club may appoint.

He shall maintain a book listing all members of the organization.

He shall perform such other duties as may be required of him by the club or by his office.

Article IX. Duties of the Treasurer.

It shall be the duty of the Treasurer to receive all dues and monies belonging to

the club and pay all orders drawn on him by a majority vote of the members of the club present at a regular meeting, or at a time intervening between meetings when ordered by the Board of Directors and signed by the President.

The treasurer shall make a complete report on all monies received and disbursed at the meeting immediately following termination of a quarter, namely 31 March, 30 June, 30 September and 31 December.

He shall perform such other duties as may be required of him by the club or his office.

Article X.

The By-Laws of the corporation may be amended by a three-fourths vote of the membership after due notice as provided herein. Proposals for amendment shall be submitted in writing at a regular meeting of the corporation and may not be voted upon until the next regular meeting.

Motion to amend the By-Laws of the corporation made at any regular meeting shall be mailed to each member at least fifteen days prior to the next regular meeting, at which time a vote will be taken. Votes of absentee members may be exercised by written proxy.

Article XI.

In any question coming before a meeting for which no provision has been made in the articles of incorporation and by-laws, the officer presiding over the meeting shall be governed by "Roberts Rules of Order".

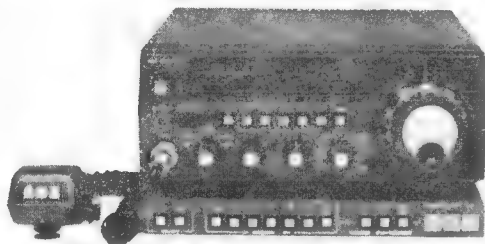


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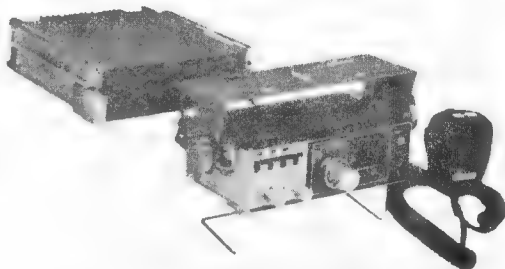


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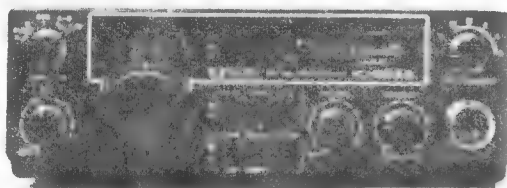
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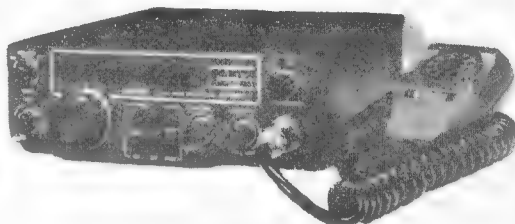


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maintaining the station lagged. When W6DEF moved to Auburn in 1975, Loren Chan, WA6ENC, who then was living in Redwood City, agreed to assume the responsibility of station trustee. For the last five years, K60TR has remained on the air and has been active on 2 Meters, on AM from 1975 to 1978, and on FM from 1979 to date.

Now that K60TR is no longer affiliated with the Red Cross, its original reason for being is no more. The station's license will expire in September 1980. It will not be renewed. All that remains to remind us of the 25 year existence of K60TR is the trusty 2 Meter ground plane that still sits atop the Red Cross building. Use of the antenna and location for emergency communications by radio amateurs will still be possible through prior arrangement with Red Cross Officials.

K60TR's three Gonset IIs, one Gonset III, and one Gonset IV were all transferred on February 18, 1980 to WB6WBK, K7UDG and PAARA Explorer Post 599 for their 2 Meter AM network. Another generation of new hams will be using the station's equipment to gain some on-the-air experience behind the microphone. Loren, WA6ENC

8 8 8 8 8 8 8

!! COME ONE--COME ALL !!

Announcing our 2nd PAARA picnic! Mark the day on your calendar--Sunday April 20th at 10 a.m. or after. The place will be beautiful Huddart Park northwest of Woodside on Kings Mountain Road. Our picnic site will be Mewok Shelter.

The club will provide soft drinks, beer, coffee and charcoal for the fire. There will also be door prizes.

Admission to the park is \$2.00 per car. There are signs directing you to the picnic site and someone will be listening on the club frequency if you need assistance.

Jock, N6YV
Picnic Chairman

FROM CRYSTAL TO CRYSTAL

"Have you got a uniform?" asked the Marine Radio Manager. "Yes," I replied. "All right. You can have the job as 3rd on the Sierra."

What a day! Graduated from high school in the morning, got a job as a seagoing radio operator in the afternoon. I didn't have a uniform or any money to buy one, and I didn't know anything about the Sierra. After I wheedled my grandfather into paying for my uniforms as a graduation present, Joe Harris, Outfitter to Seamen on San Francisco waterfront, fitted them to me. And I learned that the Sierra, a passenger liner of Oceanic Steamship Co., ran to Australia via Honolulu and Pago Pago.

We sailed July 8, 1924

My commercial ticket was only three months old, but my Amateur license had been obtained four years before. My first receiver was a galena crystal, cat whisker detector and "loose coupler" tuner. Transmitter was a Murdoch $\frac{1}{2}$ KW transformer and a rotary spark gap, which continually knocked the crystal out of adjustment during transmission.

The apparatus on the Sierra, WHJ, was an SE 143 receiver, $\frac{1}{2}$ KW quenched spark set and a 2 KW Poulsen arc. The arc operated in an atmosphere of alcohol vapor, alcohol being drop fed during operation by a needle valve actuated by a solenoid on "Transmit". We had trouble with the valve, so we started and stopped the alcohol feed by hand.

We were three days out before I got any messages to send on my watch, then I got two. I called San Francisco, KFS. This was a momentous occasion, my first commercial traffic handling. KFS told me to wait. In my excitement I forgot to turn off the alcohol feed. Time passed. KFS called me. I struck the arc. The explosion was muffled, but ample. The heavy, hinged upper part of the arc chamber rose two

inches, pieces of gasket flew out in all directions and a cloud of evil smelling smoke filled the shack. So much for my traffic handling. The rest of the watch was spent putting things back together again, while KFS called me in vain.

After the Sierra there were other ships, including the S.S. Harvard, Colombia, H.F. Alexander and President Lincoln. The "H.F." was a beautiful liner, long and narrow, built to beat train time between San Francisco and Seattle. She could act up a bit going north when the wind and sea were going south, a circumstance which did not make life more pleasant while sitting in a chair during a long early morning watch. However, she carried a large number of passengers, so the considerable amount of traffic we had to handle helped keep our minds away from our stomachs. I received my first and only SOS on the "H.F." Going south we were far offshore opposite the mouth of the Columbia River when I heard a very loud distress signal. It was sent from the S.S. Laurel, an intercoastal freighter. Crossin the Columbia River bar, outbound she lost power and began drifting toward the beach. The USCG cutter Redwing went to her assistance, but was unable to get a line aboard, and the Laurel went on the beach. Eventually she broke in two, a total loss.

I signed off my last ship, the President Lincoln, in 1929. Thereafter the time demanded by my new activities did not leave any for ham radio. Over the years I was aware of the tremendous changes in radio communication. I knew the crystal detector, arc and spark were gone, followed by the rise and fall of tubes and the development of solid state.

After retirement three years ago I prepared to get back into amateur radio. I studied for the General examination, because I felt I could not be a novice again. When the young lady in the FCC examination room told me I had passed, I thought of my first license in 1920. Novice to General in 56 years. As I started to leave, the

young lady called, "Just a moment. I notice you do not have a Novice license. The New regulations require that you have a Novice before you can be a General."

"Okay," I said. "Can I take it now?" "Don't you want to study a little more first?" she asked. If you fail the Novice you won't get the General." "I like to live dangerously. I'll try it now." When I turned in my examination the young lady smiled. "You passed the Novice," she said. "So now you have the General."

As I walked out I thought how the time element had changed. This time I had gone from Novice to General in less than a minute.

Only when I joined PAARA net did I realize that everything, and nothing, had changed. I had come full circle. On 147.45 I was still operating a crystal.

Jerry Zobel, W6ARA

FOR SALE:

HAMCO Iambic paddle, "The Scotia" Model. Like new. Only 6 months old. Never operated above 25 wpm. Surplus because xyl gave me something like it for my birthday. W6KTP (Leon) Palo Alto. Call 494-2613 Asking \$30

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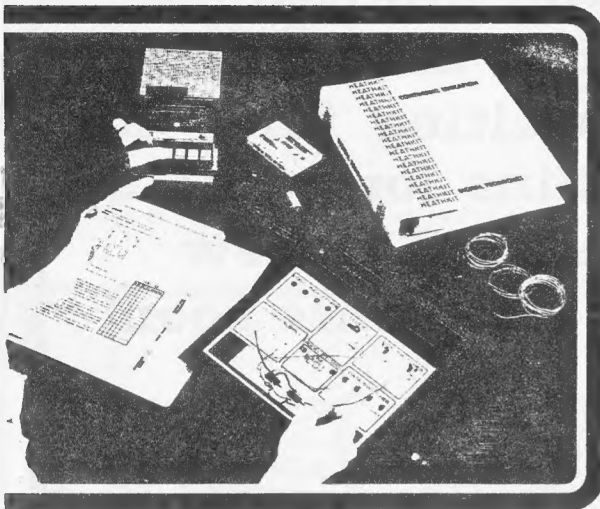
SB 220 Heathkit Linear with 10 meter band \$470.00
Tiff W6GMX phone: 324-4524

WANTED:

VFO for DX-60 prefer Heath HG-10 call Jim K7UDG

Need BC-659 Xcsvr and vibrator supply. Also need shockmount FT-250 and whip antenna AN-29. Am interested in purchasing any WWII or newer surplus vehicular radios and antennas.
Please call Paul, WA6IJP 369-4034

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5. Understand the operation of digital logic gates.
6. Identify the more commonly used integrated circuit families used in digital equipment and discuss their operation, characteristics, and features.
7. Use Boolean Algebra to express logic operations and minimize logic circuits in design.
8. Understand the operation of flip-flops.
9. Understand the operation and application of binary and BCD counters, shift registers and other sequential logic circuits.
10. Name the most frequently used combinational logic circuits and explain their operation.
11. Design both combinational and sequential logic circuits for a given application from definition and concept to the selection of the integrated circuits.
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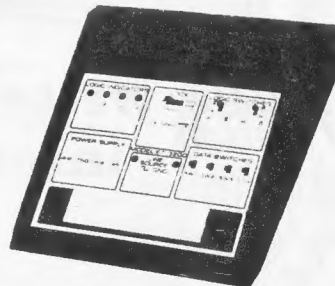
The Heathkit Electronic Trainer is the way to learn by doing. Use it to perform all the experiments in the Digital Techniques Program, develop projects, build and test prototypes, verify circuit operation and check digital IC's. Has solderless breadboard sockets for experimentation and design, four binary data switches, 2 "no-bounce" switches to pulse logic circuits, 3-frequency pulse clock generator and 4 LED's for visual indication of logic states. The ET-3200 also contains three regulated power supplies with outputs of +12 VDC @ 100 mA, -12 VDC @ 100 mA and +5 VDC @ 500 mA. Each output features current limiting and is overload protected for safe operation. Breadboard sockets accommodate up to eight 14 or 16-pin dual-in-line IC's, also 24, 28, and 40-pin DIP's. The power supplies and circuitry of the ET-3200 are compatible with most

of today's commonly-used integrated circuit logic families including: RTL; DTL; TTL; CMOS; ECL; NMOS; PMOS; Linear. For 120/240 VAC, 60/50 Hz.

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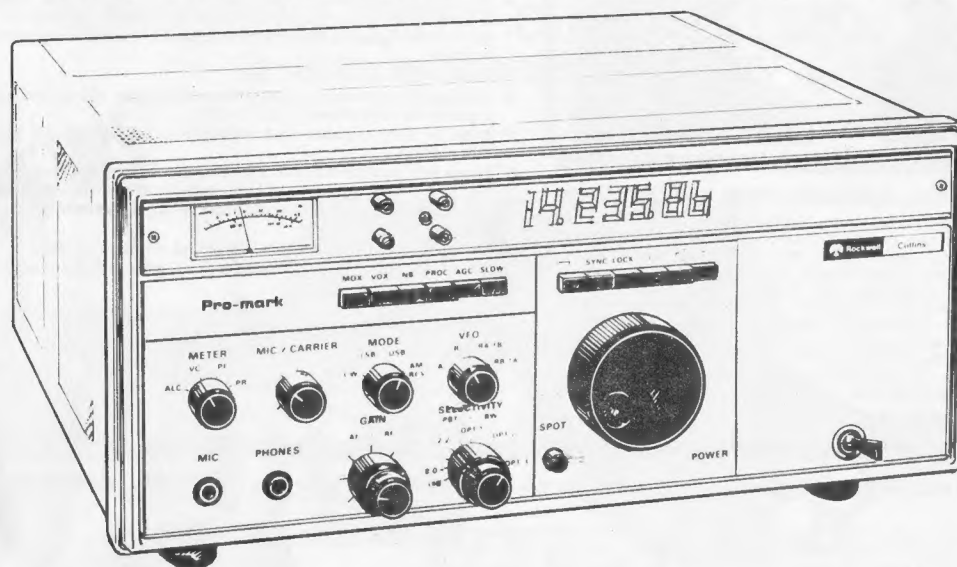
Use for the experiments in the program, and for circuit design and experimentation after you complete it.

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